Appendix G (continued)

Laboratory Results and Data Validation Reports

CB&I
2700 Chandler Avenue, Building C
Las Vegas, NV 89120
Tel: +1 702 795 0515
Fax: +1 702 795 8210
www.CBI.com

November 30, 2015

Mark Loomis
Environmental Scientist
US EPA Great Lakes National Program Office
77 W. Jackson Blvd G-17J
Chicago, IL 60604

Document ID #: 4025-11302015-1

Dear Mr. Loomis:

EPA CONTRACT NUMBER EP-W-10-033
TASK ORDER NUMBER 4025
DATA VALIDATION SUPPORT

Enclosed please find the Summary of Qualifier Changes for the validation of Total Organic Carbon (TOC), Ammonia, Metals, Mercury, Aroclor, Pesticide, Semivolatile, Semivolatile-SIM, Volatile, Acid Volatile Sulfide (AVS), and Simultaneously Extracted Metals (SEM), Organotins, and Dioxin/Furans sediment sample data for the Superior Waterfront Characterization St. Louis River and Bay Area of Concern, Superior, Wisconsin analyzed by the TestAmerica Laboratory, in Burlington, Vermont, Pittsburgh, Pennsylvania, and Knoxville, Tennessee. This report is a deliverable under Task 3 of the subject Task Order.

If you have any questions, please feel free to contact me.

Sincerely,

Shellee McGrath

Shellee McGrath
Task Leader, QATS Program
CB&I Federal Services, LLC
Phone: 702.895.8719
E-Mail Address: shellee.mcgrath@CBIfederalservices.com

cc: Shari Myer, EPA-ASB, QATS Task Order Project Officer
Administrative Contracting Officer (letter only)

CB&I
2700 Chandler Avenue, Building C
Las Vegas, NV 89120
Tel: +1 702 795 0515
Fax: +1 702 795 8210
www.CBI.com

RELEASE OF VALIDATED DATA

DATE: November 30 , 2015

SUBJECT: Review of Data for the Superior Waterfront Characterization St. Louis River and Bay Area of Concern, Superior, Wisconsin
Received for Review: October 28, 2015 and November 10, 2015

LABORATORY: TestAmerica Laboratory, Burlington, Vermont
TestAmerica Laboratory, Pittsburgh, Pennsylvania
TestAmerica Laboratory, Knoxville, Tennessee
AXYS Analytical Services, Sidney, B.C., Canada

FROM: CB&I Federal Services LLC
Quality Assurance Technical Support (QATS) Program, Las Vegas, NV

TO: Mark Loomis, Great Lakes National Program Office (GLNPO)

LEVEL OF REVIEW: Tier 2 Validation Review

QATS has completed review of the validated data for the following project:

SITE Name: Superior Waterfront Characterization St. Louis River and Bay Area of Concern, Superior, Wisconsin

Contractor: EA Engineering, Science, and Technology, Inc., Hunt Valley, Maryland

Primary Validators: Meridian Consultant Group, Inc. (MCGI), Annapolis, Maryland

SDG Numbers: J28803, J28805, J28831, J28839, J28849, J28895, J28916, J28921, J28934, J28938, and J28965

Analytical Methods: Total Organic Carbon (TOC) (Lloyd Kahn), Ammonia (EPA Method 350.1), Metals and Mercury (ISM02.2), Aroclor (SOM02.2), Pesticides (SOM02.2), Semivolatile (SOM02.2), Semivolatile-SIM (SOM02.2), Volatile (SOM02.2), Acid Volatile Sulfide (AVS) (EPA-821-R-91-100), and Simultaneously Extracted Metals (SEM) (SW-846 6010C/7470A), Organotin (EPA Method 8323), Dioxin/Furan (EPA Method 1613B), and Pharmaceutical and Personal Care Product Analysis

Number and Type of Samples: 215 Sediment Samples

Case Number: NA
Site Name: Superior Waterfront
SDG Number: various
Laboratory: TestAmerica Laboratory

VALIDATION SUMMARY

This report summarizes the data verification of previously validated analytical sample results from the Superior Waterfront Characterization St. Louis River and Bay Area of Concern, Superior, Wisconsin, in support of EPA's Great Lakes National Program Office (GLNPO). This evaluation was performed by CB&I's Quality Assurance Technical Support Program (QATS) under Technical Direction 11, Task Order 4025.

Two hundred fifteen (215) sediment samples in 11 Sample Delivery Groups (SDGs) were collected by EA Engineering, Science, and Technology, Inc. (EA) from the Superior Waterfront site locations between July 07, 2015 and July 20, 2015 and shipped to the TestAmerica Laboratory in Burlington, Vermont for analysis and distribution to other project support laboratories.

The TestAmerica Laboratory in Burlington, Vermont analyzed the samples for TOC, Metals, Mercury, Aroclors, Pesticides, Semivolatiles SIM, Semivolatiles, Volatiles, Acid Volatile Sulfides (AVS), Simultaneously Extracted Metals (SEM), and Organotins. The TestAmerica Laboratory in Knoxville analyzed the samples for Dioxin/Furans and the TestAmerica Laboratory in Pittsburgh performed the Ammonia analysis. The Pharmaceutical and Personal Care Product analysis was performed by AXYS Analytical Services in British Columbia, Canada. Meridian Consultant Group, Inc. (MCGI) in Annapolis, Maryland performed an initial full validation on all samples, and provided Data Validation Reports (DVRs) to EA dated October 2015. The organic fractions were validated by MCGI in accordance with the National Functional Guidelines (NFG) for Superfund Organic Methods Data Review, August 2014, and the inorganic parameters by the National Functional Guidelines (NFG) for Superfund Inorganic Methods Data Review, August 2014.

At the direction of EPA, the validated data and an Electronic Data Deliverable (EDD) file were sent by EA to QATS on October 28, 2015 for a data validation/verification check. One missing data package for the SOM02.2 fractions of SDG J28965 was requested by QATS and received on November 10, 2015. Since a full validation had previously been performed by the original contractor (MCGI), QATS conducted a Tier 2 validation check (without the full validation reports) on all SDGs using the Tier 2 Validation Worksheets developed by QATS specifically for GLNPO validation. The NFGs for Superfund Organic Methods Data Review, August 2014, and Superfund Inorganic Methods Data Review, August 2014 were used by QATS for the validation/verification. The resulting QATS qualifiers were compared to the MCGI-applied qualifiers and verified in the EDD files included with the data submission.

A summary of the discrepancies observed and revisions applied to the previously validated data are as follows:

- Six (6) of the 215 samples had percent moisture contents that were greater than or equal to 70% and less than 90%, which impacted 222 Aroclor, Organotins, Volatile, PAH, and PAH-SIM sample results. Although the August 2014 Organic NFG leaves the qualifying of sample results to professional judgment, QATS validators applied "J" or "UJ" qualifiers to these sample results to remain consistent with past GLNPO projects.

- MCGI validators used 35% RPD as the acceptance criteria for the field duplicate analysis. MCGI stated in the DVR, "For the associated soil field duplicate pair, the same criteria as for the laboratory duplicate were used, as stated in the USEPA National Functional Guideline (NFG) for Inorganic Data Review, dated August 2014." The field duplicate RPD criterion provided in the project-specific QAPP is 50%, and as a general GLNPO rule, results are not qualified for field duplicate RPD unless the RPD is greater than 100%. In

addition, MCGI qualified results "J" and "UJ" when one result is a non-detect (ND) and the other result is between the MDL and CRQL ("J" value). For these samples and their associated field duplicate samples an RPD is not calculated and no qualifiers should be applied.

- For the inorganic fractions, MCGI qualified all the samples in the SDG when one field duplicate RPD was greater than 35%, even when there were multiple field duplicate samples within the SDG. For the qualifiers applied due to the field duplicate analyses by MCGI, 588 "J" qualifiers were unnecessary and not applied by QATS due to the incorrect criteria used for field duplicate RPD.

- During the validation process, it was observed that the results for nine Aroclor samples, two Organotin samples, and three Acid Volatile Sulfate samples were calculated and reported using the percent solids that were obtained from the Volatile aliquot, and not the percent solids from the aliquot used to prepare the samples for analysis. The results in the EDD files have been corrected by the QATS validators, the reports are being corrected by the laboratory.

- At the direction of EA, the reporting limit was entered into the "DVR" column in the EDD file for all results changed to "U" due to blank contamination.

- The Geotechnical results are included in the EDD file; however, the data for Moisture Content (ASTM D2216-90) and Particle Size (ASTM D422) were checked for completeness only. However, it was noted in the EDD that the moisture content result for sample SW15-SB02-8010 (SDG 28849-3) was reported as -4105.5%. It appears there may be a typographical error on the Geotechnical Batch Worksheet. The "Sample Mass Dry" entered for this sample is -0.10 g.

Data validation and verification were performed on 37,899 results from 1,555 analyses of the 215 project samples. Of the 37,899 analytical results, 36,353 originally-validated analytical results and qualifiers were verified to be correct. The QATS-applied qualifiers differed from the MCGI-applied qualifiers for 1,546 of the 37,899 reported results (4.1%).

A summary of the QATS-applied data qualifiers that differ from those assigned by MCGI, by SDG and fraction, was prepared and is presented in tabular form in the next 29 pages of this report. The MCGI applied qualifiers were entered into the "DVQ" column in the EDD files. QATS qualifiers were entered into the "Interpreted Qualifier" column; the QATS qualifiers that do not agree with the MCGI applied qualifiers are highlighted in blue.

DATA QUALIFICATION DIFFERENCES SUMMARY TABLE

SDG/Fraction	Analyte/ Compound	MCGI Qualifier	QATS Qualifier	EPA Sample ID	QATS Justification for EDD Revision
J28803 AROCLOR	Aroclor-1016, Aroclor-1221 Aroclor-1232, Aroclor-1242 Aroclor-1248, Aroclor-1254 Aroclor-1260, Aroclor-1262 Aroclor-1268	U	UJ	SW15-SLB10-2040	In accordance with the Organic NFG, sample results are qualified "J" or "UJ" when the percent moisture is ≥ 70% and < 90%. Either a "J" qualifier was added to the "U", or a "J" qualifier was assigned.
J28803 AMMONIA	Ammonia, distilled	J	J-	SW15-SLB14-SURF	The ammonia results were qualified "J-" due to a low matrix spike recovery. The qualifier entered for this sample in the EDD file was "J". The assigned QATS qualifier is "J-". The MCGI report indicates that the "J" is due to the "J+" for blank contamination cancelling out the "J-"; however, the level detected in the sample is > 10x the level detected in the blank; therefore, according to the Inorganic NFG, the blank does not affect the sample result and no action is taken.
J28803 PAH-SIM	Benzo(g,h,i)perylene	None	J	SW15-SLB14-SURF SW15-SLB08-0520-FD	The initial validators did not qualify this compound for final CCV %D failure, stating that the closing CCV criteria for this compound is advisory. Although the SOW does state that the limits are advisory for analysis by SIM, the QATS validators do not agree that exceedance should be ignored and therefore added a "J" qualifier.
J28803 PAH-SIM	Acenaphthene, Acenaphthylene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(g,h,i)perylene Benzo(k)fluoranthene Chrysene Dibenzo(a,h)anthracene Indeno(1,2,3-cd)pyrene Naphthalene	U	UJ	SW15-SLB10-2040	In accordance with the Organic NFG, sample results are qualified "J" or "UJ" when the percent moisture is ≥ 70% and < 90%. Either a "J" qualifier was added to the "U", or a "J" qualifier was assigned.
	Fluoranthene Pyrene	None	J		
J28803 PAH-SIM	Anthracene Benzo(k)fluoranthene Chrysene, Fluoranthene Fluorene, Phenanthrene Total 16 PPAH	J	None	SW15-SLB08-0520 SW15-SLB08-0520-FD	The initial validators qualified results "J" due to the field duplicate comparison. Three field duplicate RPDs are < 50% criteria listed in the QAPP. The remaining RPDs are > 50% but < 100%; therefore, the "J" qualifiers were removed unless the reported concentration was between the MDL and CRQL.
J28803 SVOC	4-Chloroaniline 3,3'-Dichlorobenzidine Hexachlorocyclopentadiene	R	UJ	SW15-SLB14-0520 SW15-SLB14-SURF SW15-SLB08-0520	The initial validators qualified results "R" due to 0% recoveries for DMC6 (4-Chloroaniline-d4). The advisory limits for this DMC are 1-145%. The results should not be rejected based on the 0% R when the low limit is 1%. The QATS validators removed the "R" qualifier and replaced it with a "UJ".
J28803 SVOC	Bis(2-ethylhexyl)phthalate	U1	UJ	SW15-SLB13-2040	The initial validators changed the "J" qualifier to "U1" due to blank contamination; however, the internal standard was also out of criteria; therefore, the "U1" qualifier was changed to "UJ".
J28803 SVOC	Butylbenzylphthalate	U1	UJ	SW15-SLB14-0520	The initial validators changed the "J" qualifier to "U1" due to blank

DATA QUALIFICATION DIFFERENCES SUMMARY TABLE

SDG/Fraction	Analyte/ Compound	MCGI Qualifier	QATS Qualifier	EPA Sample ID	QATS Justification for EDD Revision
	Bis(2-ethylhexyl)phthalate				contamination; however, the internal standard was also out of criteria; therefore, the "U1" qualifier was changed to "UJ".
J28803 SVOC	Butylbenzylphthalate	U1	UJ	SW15-SLB13-0520 SW15-SLB13-SURF	The initial validators changed the "J" qualifier to "U1" due to blank contamination; however, the internal standard was also out of criteria; therefore, the "U1" qualifier was changed to "UJ".
J28803 SVOC	Di-n-butylphthalate	U1	J	SW15-SLB14-0520 SW15-SLB13-0520 SW15-SLB13-SURF	The initial validators changed the "J" qualifier to "U1" due to blank contamination; however, this compound was not reported in the associated blank.
J28803 SVOC	Di-n-octylphthalate	U1	J+	SW15-SLB13-SURF	The initial validators changed the "J" qualifier to "U1" due to blank contamination; however, this compound was not reported in the associated blank. The internal standard was also out of criteria; therefore, the "U1" qualifier was changed to "J+".
J28803 SVOC	4,6-Dinitro-2-methylphenol	UJ	U	SW15-SLB14-0520	The initial validators qualified the compound "UJ"; however, it is not clear why it was qualified. QATS replaced this qualifier with the original "U".
J28803 SVOC	4,6-Dinitro-2-methylphenol	R	UJ	SW15-SLB13-2040 SW15-SLB11-6080	The initial validators qualified results "R" due to 0% recoveries for DMC14 (4,6-Dinitro-2-methylphenol-d2). The limits for this DMC are 10-130%. The results should not be rejected based on the 0%R when the low limit is 10%. The NFG says to qualify non-detects "R" when the %R is < 10% (excluding DMCs with 10% as a lower acceptance limits); therefore, the QATS validators removed the "R" qualifier and replaced it with a "UJ".
J28803 SVOC	Atrazine	U	UJ	SW15-SLB13-2040 SW15-SLB11-4060 SW15-SLB11-6080	Internal standard 4 (Phenanthrene-d10) exceeded criteria. This compound is associated with IS4 and should have been qualified "UJ".
J28803 SVOC	Butylbenzylphthalate	U	UJ	SW15-SLB11-4060	Internal standard 5 (Chrysene-d12) exceeded criteria. This compound is associated with IS5 and should have been qualified "UJ".
J28803 SVOC	Hexachlorobenzene	U	UJ	SW15-SLB11-6080	Internal standard 4 (Phenanthrene-d10) exceeded criteria. This compound is associated with IS4 and should have been qualified "UJ".
J28803 SVOC	Benzo(a)anthracene Caprolactam Chrysene, Di-n-butylphthalate	U1	J	SW5-SLB08-0520	The initial validators changed the "J" qualifier to "U1" due to blank contamination; however, these compounds were not reported in the associated blank. The "U1" qualifier was changed back to the original "J".
J28803 SVOC	Carbazole	UJ	U	SW5-SLB08-0520	The initial validators qualified Carbazole "UJ" due to field duplicate comparison. One result is a "J" value (between the MDL and CRQL), and the other result is ND. Therefore, the "UJ" qualifier was removed and replaced with a "U".
J28803 SVOC	Hexachlorocyclopentadiene	U	UJ	SW15-SLB08-0520-FD	The associated CCV %D exceeded criteria.
J28803 DIOXIN	1,2,3,7,8,9-HxCDF	J	U	SW15-SLB10-0520 SW15-SLB10-0520-FD	A trace level of the compound was detected in the associated method blank. The result is less than 5x the level detected in the

DATA QUALIFICATION DIFFERENCES SUMMARY TABLE

SDG/Fraction	Analyte/ Compound	MCGI Qualifier	QATS Qualifier	EPA Sample ID	QATS Justification for EDD Revision
				SW15-SLB10-SURF	method blank; therefore, the result is changed to a "U".
J28803 DIOXIN	1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDD 2,3,7,8-TCDF, OCDD, OCDF	J	None	SW15-SLB10-0520	The initial validators qualified the compounds listed "J" due to field duplicate comparison. All the RPDs were > 50% criteria listed in the QAPP, but < 100%, therefore, the "J" qualifiers were removed.
J28803 DIOXIN	1,2,3,4,6,7,8-HpCDD 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,6,7,8-HxCDF 1,2,3,7,8-PeCDD, 2,3,7,8-TCDD 2,3,7,8-TCDF, OCDF	J	None	SW15-SLB10-0520-FD	The initial validators qualified the compounds listed "J" due to field duplicate comparison. All the RPDs were > 50% criteria listed in the QAPP, but < 100%, therefore, the "J" qualifiers were removed.
J28803 DIOXIN	1,2,3,7,8-PeCDD	J	U	SW15-SLB10-SURF	A trace level of the compound was detected in the associated method blank. The result is < 5x the level detected in the method blank; therefore, the result is changed to "U".
J28803 METALS	Mercury	J+	None	SW15-SLB13-0520 SW15-SLB13-2040 SW15-SLB13-4060 SW15-SLB11-4060 SW15-SLB11-6080 SW15-SLB10-0520 SW15-SLB10-2040 SW15-SLB12-0520 SW15-SLB12-2040	The initial validators qualified detected results "J+" due to a high MS percent recovery. However, spike recovery limits do not apply when the sample concentration is ≥ 4x the spike added. The "J+" qualifiers were removed.
J28805 AROCLOR	Aroclor-1254	UJ	U	SW15-SLB09-SURF-FD	The initial validators qualified "J" and "UJ" due to field duplicate comparison. One result is a "J" value (between the MDL and CRQL), and the other result is ND. The QATS validators disagree with the qualification. The "UJ" qualifier was removed and replaced with a "U". The original sample results are still a "J" value; therefore, the "J" qualifier remains.
J28805 SEM METALS	Mercury SEM	UJ	U	SW15-SLB08-SURF SW15-SLB15-SURF SW15-SLB16-SURF SW15-SLB09-0520 SW15-SLB09-SURF-FD SW15-SLB17-SURF SW15-SLB18-SURF	The initial validators qualified all mercury SEM results "J" and "UJ" due to field duplicate comparison. One result is a "J" value (between the MDL and CRQL), and the other result is ND. The "UJ" qualifiers were removed and replaced with a "U".
J28805 SEM METALS	Lead SEM Zinc SEM	J	None	SW15-SLB08-SURF SW15-SLB15-0520 SW15-SLB15-SURF SW15-SLB16-SURF SW15-SLB09-0520 SW15-SLB09-SURF	The initial validators qualified all lead SEM and zinc SEM results "J" due to one field duplicate comparison. The field duplicate RPDs are < 50% criteria listed in the QAPP. The "J" qualifiers were removed.

DATA QUALIFICATION DIFFERENCES SUMMARY TABLE

SDG/Fraction	Analyte/ Compound	MCGI Qualifier	QATS Qualifier	EPA Sample ID	QATS Justification for EDD Revision
				SW15-SLB09-SURF-FD SW15-SLB17-SURF SW15-SLB18-SURF	
J28805 SVOC	4-Chloroaniline 3,3'-Dichlorobenzidine Hexachlorocyclopentadiene	R	UJ	SW15-SLB08-2040 SW15-SLB08-SURF	The initial validators qualified results "R" due to 0% recoveries for DMC6 (4-Chloroaniline-d4). The advisory limits for this DMC are 1-145%. The results should not be rejected based on the 0% R when the low limit is 1%. The QATS validators removed the "R" qualifier and replaced it with a "UJ".
J28805 SVOC	Bis(2-ethylhexyl)phthalate	J+	None	SW15-SLB08-SURF	The initial validators qualified "J+", however, it is not clear why it was qualified in the Data Validation Report. QATS removed the "J+" qualifier.
J28805 METALS	Calcium	J	None	SW15-SLB08-2040 SW15-SLB08-SURF SW15-SLB15-0520 SW15-SLB15-2040 SW15-SLB15-4060 SW15-SLB15-SURF SW15-SLB16-0520 SW15-SLB16-0520-FD SW15-SLB16-2040 SW15-SLB16-SURF SW15-SLB09-0520 SW15-SLB09-2040 SW15-SLB09-4060 SW15-SLB09-SURF SW15-SLB09-SURF-FD SW15-SLB17-SURF SW15-SLB18-SURF	The initial validators qualified all calcium results "J" due to one field duplicate comparison. The field duplicate RPDs are < 50% criteria listed in the QAPP. The "J" qualifiers were removed.
J28805 METALS	Selenium	UJ	U	SW15-SLB08-2040 SW15-SLB08-SURF SW15-SLB15-2040 SW15-SLB15-4060 SW15-SLB16-0520-FD SW15-SLB16-2040 SW15-SLB16-SURF SW15-SLB09-2040 SW15-SLB09-4060	The initial validators qualified all selenium results "J" and "UJ" due to one field duplicate comparison. One result is a "J" value (between the MDL and CRQL), and the other result is ND. The "UJ" qualifiers were removed and replaced with a "U".
J28831 SVOC	N-Nitrosodiphenylamine	U	UJ	SW15-SLB02-0520 SW15-SLB02-2040 SW15-SLB02-4060 SW15-SLB02-6080 SW15-SLB02-SURF SW15-SLB03-8010	The associated opening CCV %D exceeded criteria.
J28831 SVOC	Di-n-butylphthalate	U	J	SW15-SLB02-2040	The initial validators changed the "J" qualifier to "U1" due to blank

DATA QUALIFICATION DIFFERENCES SUMMARY TABLE

SDG/Fraction	Analyte/ Compound	MCGI Qualifier	QATS Qualifier	EPA Sample ID	QATS Justification for EDD Revision
					contamination; however, this compound was not reported in the associated blank.
J28831 SVOC	Bis(2-ethylhexyl)phthalate	U1	UJ	SW15-SLB02-SURF	The initial validators changed the "J" qualifier to "U1" due to blank contamination; however, the internal standard was also out of criteria; therefore, the "U1" qualifier was changed to "UJ".
J28831 SVOC	1,4-Dioxane 2,2'-Oxybis(1-chloro-propane) 2-Chlorophenol, 2-Methylphenol 4-Methylphenol, Acetophenone Benzaldehyde Bis(2-chloroethyl) ether Hexachloroethane, Phenol, N-Nitroso-di-n-propylamine	UJ	U	SW15-SLB03-2040	The initial validators qualified the compounds associated with Internal Standard 1 with a "UJ" and listed it as exceeding criteria in the table in the Data Validation Report. Internal Standard 1 was actually within criteria for this sample; therefore, the "UJ" qualifiers were restored to the original "U" for the associated compounds.
J28831 SVOC	2,6-Dinitrotoluene 2-Chloronaphthalene	UJ	U	SW15-SLB03-2040	The initial validators qualified the results "UJ", however, it is not clear why it was qualified. QATS replaced this qualifier with the original "U".
J28831 SVOC	2,2'-Oxybis(1-chloro-propane) 2-Chlorophenol, 2-Methylphenol 4-Methylphenol, Acetophenone Benzaldehyde Bis(2-chloroethyl) ether Hexachloroethane N-Nitroso-di-n-propylamine Phenol	UJ	U	SW15-SLB03-8010	The initial validators qualified the compounds associated with Internal Standard 1 with "UJ" and listed it as exceeding criteria in the table in the Data Validation Report. Internal Standard 1 was actually within criteria for this sample; therefore, the "UJ" qualifiers were restored to the original "U" for the associated compounds.
J28831 SVOC	Benzo(a)anthracene	U1	U	SW15-SLB03-8010	The initial validators changed the "J" qualifier to "U1" due to blank contamination; however, this compound was not reported in the associated blank.
J28831 SVOC	2,2'-Oxybis(1-chloropropane) 2,4-Dichlorophenol 2,4-Dimethylphenol 2-Chlorophenol, 2-Nitrophenol 4-Chloro-3-methylphenol 4-Chloroaniline Bis(2-chloroethoxy)methane Bis(2-chloroethyl) ether Bis(2-ethylhexyl)phthalate Butylbenzylphthalate Caprolactam Hexachlorobutadiene Hexachloroethane Isophorone, Nitrobenzene N-Nitroso-di-n propylamine Naphthalene 2-Methylnaphthalene	U None	UJ J	SW15-SLB03-SURF SW15-SLB03-SURF-FD	In accordance with the Organic NFG, sample results are qualified "J" or "UJ" when the percent moisture is ≥ 70% and < 90%. Either a "J" qualifier was added to the "U", or a "J" qualifier was assigned.

DATA QUALIFICATION DIFFERENCES SUMMARY TABLE

SDG/Fraction	Analyte/ Compound	MCGI Qualifier	QATS Qualifier	EPA Sample ID	QATS Justification for EDD Revision
J28831 PAH SIM	1-Methylnaphthalene 2-Methylnaphthalene Acenaphthene Benzo(a)anthracene Benzo(a)pyrene Benzo(g,h,i)perylene Benzo(k)fluoranthene Dibenzo(a,h)anthracene Fluorene, Naphthalene	None	J	SW15-SLB03-SURF	In accordance with the Organic NFG, sample results are qualified "J" or "UJ" when the percent moisture is ≥ 70% and < 90%. Either a "J" qualifier was added to the "U", or a "J" qualifier was assigned.
J28831 PAH SIM	1-Methylnaphthalene 2-Methylnaphthalene Benzo(a)anthracene Benzo(a)pyrene Benzo(g,h,i)perylene Benzo(k)fluoranthene Fluorene Naphthalene	None	J	SW15-SLB03-SURF-FD	In accordance with the Organic NFG, sample results are qualified "J" or "UJ" when the percent moisture is ≥ 70% and < 90%. Either a "J" qualifier was added to the "U", or a "J" qualifier was assigned.
J28831 VOA	1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloro-1,2,2-trifluoroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,2,3-Trichlorobenzene 1,2,4-Trichlorobenzene 1,2-Dibromo-3-chloropropane 1,2-Dibromoethane 1,2-Dichlorobenzene 1,2-Dichloroethane 1,2-Dichloropropane 1,3-Dichlorobenzene 1,4-Dichlorobenzene 2-Butanone, 2-Hexanone 4-Methyl-2-pentanone Acetone, Benzene Bromochloromethane Bromodichloromethane Bromoform, Bromomethane Carbon disulfide Carbon tetrachloride Chlorobenzene, Chloroethane Chloroform, Chloromethane cis-1,2-Dichloroethene cis-1,3-Dichloropropene Cyclohexane	U None	UJ J	SW15-SLB03-SURF	In accordance with the Organic NFG, sample results are qualified "J" or "UJ" when the percent moisture is ≥ 70% and < 90%. Either a "J" qualifier was added to the "U", or a "J" qualifier was assigned.

DATA QUALIFICATION DIFFERENCES SUMMARY TABLE

SDG/Fraction	Analyte/ Compound	MCGI Qualifier	QATS Qualifier	EPA Sample ID	QATS Justification for EDD Revision
	Dibromochloromethane Dichlorodifluoromethane Ethylbenzene Isopropylbenzene Methyl tert-butyl ether Methylcyclohexane Methylene chloride o-Xylene, Styrene Tetrachloroethene trans-1,2-Dichloroethene trans-1,3-Dichloropropene Trichloroethene Trichlorofluoromethane Vinyl chloride, Methyl acetate				
J28831 METALS	Cadmium	J	None	SW15-SLB01-2040-FD SW15-SLB01-4060 SW15-SLB01-6080 SW15-SLB01-8010 SW15-SLB03-0520 SW15-SLB03-2040 SW15-SLB03-4060 SW15-SLB03-SURF SW15-SLB03-SURF-FD	The initial validators qualified all cadmium results "J" due to one field duplicate comparison. The field duplicate RPDs are < 50% criteria listed in the QAPP. The "J" qualifiers were removed.
J28831 METALS	Sodium	U1	J	SW15-SLB01-0520 SW15-SLB01-2040 SW15-SLB01-2040-FD SW15-SLB01-4060 SW15-SLB01-6080 SW15-SLB01-8010 SW15-SLB01-SURF SW15-SLB02-0520 SW15-SLB02-2040 SW15-SLB02-4060 SW15-SLB02-6080 SW15-SLB02-SURF SW15-SLB03-0520 SW15-SLB03-2040 SW15-SLB03-4060 SW15-SLB03-6080 SW15-SLB03-8010 SW15-SLB03-SURF SW15-SLB03-SURF-FD SW15-SLB05-0520	The initial validators qualified all sodium results "U1" due to a trace level detected in the method blank. All sodium results are "J" values; however, the levels detected in the samples are all > 100x the level detected in the MB. Therefore, the "U1" qualifier was removed and replaced with the original "J".
J28831 SEM METALS	Lead SEM Zinc SEM	J	None	SW15-SLB01-0520 SW15-SLB01-SURF	The initial validators qualified all lead SEM and zinc SEM results "J" due to one field duplicate comparison. The field duplicate RPDs are

DATA QUALIFICATION DIFFERENCES SUMMARY TABLE

SDG/Fraction	Analyte/ Compound	MCGI Qualifier	QATS Qualifier	EPA Sample ID	QATS Justification for EDD Revision
				SW15-SLB02-SURF SW15-SLB03-0520 SW15-SLB03-SURF SW15-SLB03-SURF-FD SW15-SLB05-0520	< 50% criteria listed in the QAPP. The "J" qualifiers were removed.
J28831 AROCLOR	Aroclor-1016, Aroclor-1221 Aroclor-1232, Aroclor-1242 Aroclor-1248, Aroclor-1254 Aroclor-1262, Aroclor-1268	U	UJ	SW15-SLB03-SURF SW15-SLB03-SURF-FD	In accordance with the Organic NFG, sample results are qualified "J" or "UJ" when the percent moisture is ≥ 70% and < 90%. Either a "J" qualifier was added to the "U", or a "J" qualifier was assigned.
J28839 SEM METALS	Lead SEM	U	UJ	SW15-SB03-0520	The Data Validation Narrative states, "The laboratory duplicate displayed an RPD above the QC limit for Pb & Zn. Positive results in all samples were qualified "J"." According to the Inorganic NFG (2014), the non-detected results should be qualified "UJ" as well.
J28839 SEM METALS	Lead SEM	None	J	SW15-SB36-SURF	The lead SEM results in all samples should have been qualified "J" for laboratory duplicate RPD exceedance. The "J" qualifiers were not applied to this sample by the original validators.
J28839 SEM METALS	Mercury SEM	J UJ	None U	SW15-SB02-SURF SW15-SB02-SURF-FD	The initial validators qualified all mercury SEM results "J" and "UJ" due to field duplicate comparison. One result is a low detected value, and the other result is ND. The "UJ" qualifier was removed and replaced with a "U" and the "J" was removed from the original sample result.
J28839 PEST	beta-BHC, Heptachlor epoxide Dieldrin, 4,4'-DDE Endosulfan sulfate Endrin ketone	UJ	U	SW15-SLB06-0520	The initial validators qualified "J" and "UJ" due to field duplicate comparison. One result is a "J" value (between the MDL and CRQL), and the other result is ND. The "UJ" qualifier was removed and replaced with a "U". The FD sample results are still a "J" value; therefore, the "J" qualifier remains.
J28839 AROCLOR	Aroclor-1016, Aroclor-1221 Aroclor-1232, Aroclor-1242 Aroclor-1248, Aroclor-1254 Aroclor-1260, Aroclor-1262 Aroclor-1268	U	UJ	SW15-SB36-0520	In accordance with the Organic NFG, sample results are qualified "J" or "UJ" when the percent moisture is ≥ 70% and < 90%. Either a "J" qualifier was added to the "U", or a "J" qualifier was assigned.
J28839 DIOXIN	1,2,3,4,7,8,9-HpCDF 1,2,3,6,7,8-HxCDF 1,2,3,4,7,8-HxCDF 2,3,4,7,8-PeCDF	U1	J	SW15-SB02-SURF SW15-SB02-SURF-FD	A trace level of the compound was detected in the associated method blank. The result is > 5x the level detected in the method blank; therefore, the result is changed to the original "J" qualifier.
J28839 DIOXIN	1,2,3,4,6,7,8-HpCDD 1,2,3,4,6,7,8-HpCDF	U1	J	SW15-SB03-0520	A trace level of the compound was detected in the associated method blank. The result is > 5x the level detected in the method blank; therefore, the result is changed to the original "J" qualifier.
J28839 DIOXIN	1,2,3,4,6,7,8-HpCDD	U1	J	SW15-SB03-SURF	A trace level of the compound was detected in the associated method blank. The result is > 5x the level detected in the method blank; therefore, the result is changed to the original "J" qualifier.
J28839 SVOC	4-Chloroaniline 3,3'-Dichlorobenzidine	R	UJ	SW15-SB03-SURF	The initial validators qualified results "R" due to 0% recoveries for DMC6 (4-Chloroaniline-d4). The advisory limits for this DMC are 1-

DATA QUALIFICATION DIFFERENCES SUMMARY TABLE

SDG/Fraction	Analyte/ Compound	MCGI Qualifier	QATS Qualifier	EPA Sample ID	QATS Justification for EDD Revision
	Hexachlorocyclopentadiene				145%. The results should not be rejected based on the 0% R when the low limit is 1%. The QATS validators removed the "R" qualifier and replaced it with a "UJ".
J28839 PAH SIM	Acenaphthalene Benzo(a)pyrene Fluoranthene	U None	UJ J	SW15-SB36-0520	In accordance with the Organic NFG, sample results are qualified "J" or "UJ" when the percent moisture is ≥ 70% and < 90%. Either a "J" qualifier was added to the "U", or a "J" qualifier was assigned.
J28839 PAH SIM	Benzo(g,h,i)perylene	None	J	SW15-SB02-0520 SW15-SB02-2040 SW15-SB03-SURF	The %D for the closing CCV exceeded criteria.
J28839 METALS	Cadmium	U1	J	SW15-SLB05-0520-FD SW15-SLB05-2040 SW15-SLB05-4060 SW15-SLB05-SURF SW15-SLB06-SURF SW15-SLB07-SURF SW15-SB02-0520 SW15-SB02-0240 SW15-SB02-4060 SW15-SB02-SURF SW15-SB02-SURF-FD SW15-SB36-0520	The initial validators qualified cadmium results "U1" due to a trace level detected in the method blank. Most of the cadmium results that are "J" values are > 5x the level detected in the MB. The "U1" qualifier was removed and replaced with the original "J" for these samples.
J28839 METALS	Cadmium	J+	None	SW15-SLB06-0520 SW15-SLB06-2040 SW15-SLB06-4060 SW15-SB36-SURF	The initial validators qualified detected cadmium results "J+" due to a trace level detected in the method blank. These results were greater than 10x the level detected in the MB; therefore, no qualification is necessary according to the NFG.
J28839 METALS	Mercury	U	UJ	SW15-SB02-2040 SW15-SB02-4060 SW15-SB36-2040	The initial validators qualified mercury "UJ" and "J-" for negative values reported for ICB and CCBs; however, they qualified three of the samples "U". The samples were run in the same run and all the CCBs were negative values. All non-detects should have been qualified "UJ".
J28839 METALS	Antimony	UJ	U	SW15-SLB05-4060 SW15-SLB06-SURF SW15-SLB07-SURF SW15-SB02-0520 SW15-SB02-0240 SW15-SB02-4060 SW15-SB02-SURF-FD SW15-SB03-0520 SW15-SB03-2040 SW15-SB03-SURF SW15-SB36-0520 SW15-SB36-2040 SW15-SB36-SURF	The initial validators qualified antimony "J" and "UJ" due to field duplicate comparison. One result is a "J" value (between the MDL and CRQL), and the other result is ND. The "UJ" qualifiers were removed and replaced with a "U".
J28849 DIOXINS	1,2,3,6,7,8-HxCDF	None	J	SW15-SB28-SURF	The results were reported as "EMPC" values and should be

DATA QUALIFICATION DIFFERENCES SUMMARY TABLE

SDG/Fraction	Analyte/ Compound	MCGI Qualifier	QATS Qualifier	EPA Sample ID	QATS Justification for EDD Revision
	2,3,7,8-TCDD				qualified estimated "J".
J28849 ORGANOTINS	Monobutyltin	UJ	U	SW15-SB31-0520	The LCS is flagged as exceeding criteria; however, the recovery is 24% which is within the 10-48% criteria. The "UJ" was removed and replaced by the original "U" qualifier.
J28849 ORGANOTINS	Dibutyltin, Tetrabutyltin Tributyltin	U	UJ	SW15-SB31-SURF	In accordance with the Organic NFG, sample results are qualified "J" or "UJ" when the percent moisture is ≥ 70% and < 90%. Either a "J" qualifier was added to the "U", or a "J" qualifier was assigned.
J28849 SVOC	Bis(2-ethylhexyl)phthalate Butylbenzylphthalate	U1	UJ	SW15-SB04-0520 SW15-SB07-0520 SW15-SB07-2040 SW15-SB07-SURF SW15-SB09-0520 SW15-SB09-SURF SW15-SB29-0520 SW15-SB29-SURF	The initial validators changed the "J" qualifier to "U1" due to blank contamination; however, the internal standard was also out of criteria; therefore, the "U1" qualifier was changed to "UJ".
J28849 SVOC	Bis(2-ethylhexyl)phthalate	U1	UJ	SW15-SB04-2040 SW15-SB09-2040	The initial validators changed the "J" qualifier to "U1" due to blank contamination; however, the internal standard was also out of criteria; therefore, the "U1" qualifier was changed to "UJ".
J28849 SVOC	Benzo(a)anthracene	None	J+	SW15-SB04-2040 SW15-SB07-SURF SW15-SB09-2040	Benzo(a)anthracene is associated with IS5 (Chrysene-d12) which exceeded internal standard criteria. A "J+" qualifier was assigned.
J28849 SVOC	Benzaldehyde	UJ	U	SW15-SB04-2040	Benzaldehyde is flagged "Q" in the DVR column of the EDD file indicating the Internal Standard is out of criteria; however, this compound is not associated with any of the Internal Standards that exceeded criteria. Benzaldehyde appears directly above Benzo(a)anthracene in the EDD file and may have been qualified instead of Benzo(a)anthracene. The "UJ" qualifier was removed and the original "U" qualifier assigned.
J28849 SVOC	Dimethylphthalate 4-Chlorophenyl-phenyl ether	U	UJ	SW15-SB09-2040	Dimethylphthalate is associated with IS3 (Acenaphthene-d10) which exceeded criteria. A "UJ" qualifier was assigned.
J28849 SVOC	Hexachlorobutadiene	R	U	SW15-SB29-0520 SW15-SB29-SURF	The initial validators qualified the sample result "R"; however, it is not clear why it was qualified. It may have been qualified instead of Hexachlorocyclopentadiene. QATS has restored the qualifier for this compound with the original "U".
J28849 SVOC	4-Chloroaniline 3,3'-Dichlorobenzidine	R	UJ	SW15-SB29-0520 SW15-SB29-SURF	The initial validators qualified results "R" due to 0% recoveries for DMC6 (4-Chloroaniline-d4). The advisory limits for this DMC are 1-145%. The results should not be rejected based on the 0% R when the low limit is 1%. The QATS validators removed the "R" qualifier and replaced it with a "UJ".
J28849 SVOC	1,1'-Biphenyl 1,2,4,5-Tetrachlorobenzene 2,2'-Oxybis(1-chloropropane) 2,3,4,6-Tetrachlorophenol	U	UJ	SW15-SB29-SURF	In accordance with the Organic NFG, sample results are qualified "J" or "UJ" when the percent moisture is ≥ 70% and < 90%. Either a "J" qualifier was added to the "U", or a "J" qualifier was assigned.

DATA QUALIFICATION DIFFERENCES SUMMARY TABLE

SDG/Fraction	Analyte/ Compound	MCGI Qualifier	QATS Qualifier	EPA Sample ID	QATS Justification for EDD Revision
	2,4,5-Trichlorophenol 2,4,6-Trichlorophenol 2,4-Dichlorophenol 2,4-Dimethylphenol 2,4-Dinitrophenol 2,4-Dinitrotoluene 2,6-Dinitrotoluene 2-Chloronaphthalene 2-Chlorophenol, 2-Methylphenol 2-Nitroaniline, 2-Nitrophenol 3-Nitroaniline 4,6-Dinitro-2-methylphenol 4-Bromophenyl-phenylether 4-Chloro-3-methylphenol 4-Chlorophenyl-phenyl ether 4-Methylphenol, 4-Nitroaniline 4-Nitrophenol, Acenaphthene Acenaphthylene, Atrazine Bis(2-chloroethoxy)methane Bis(2-chloroethyl) ether Caprolactam, Carbazole Diethylphthalate Dimethylphthalate Di-n-butylphthalate Hexachlorobenzene Hexachloroethane Isophorone, Nitrobenzene N-Nitroso-di-n propylamine N-Nitrosodiphenylamine Pentachlorophenol, Phenol				
J28849 METALS	Cadmium	U1	J	SW15-SB28-0520 SW15-SB28-4060 SW15-SB28-SURF SW15-SB04-0520 SW15-SB04-SURF SW15-SB07-0520 SW15-SB07-2040 SW15-SB07-SURF SW15-SB09-0520 SW15-SB09-2040 SW15-SB09-SURF SW15-SB29-0520 SW15-SB31-SURF	The initial validators qualified all cadmium results (between MDL and CRQL) with a "U1" because of blank contamination. The samples were prepared and analyzed in two separate batches. Cadmium was detected in one of the MB which affects only one batch. The "U1" qualifiers were removed from samples in the batch with a compliant blank and from samples in the affected batch when the Cd level detected in the sample was > 5x the level detected in the blank.
J28849 METALS	Sodium	U1	J	SW15-SB28-0520 SW15-SB28-2040 SW15-SB28-4060	The initial validators qualified all sodium results (between MDL and CRQL) with a "U1" because of blank contamination. The samples were prepared and analyzed in two separate batches. Sodium was

DATA QUALIFICATION DIFFERENCES SUMMARY TABLE

SDG/Fraction	Analyte/ Compound	MCGI Qualifier	QATS Qualifier	EPA Sample ID	QATS Justification for EDD Revision
				SW15-SB28-SURF SW15-SB04-0520 SW15-SB04-2040 SW15-SB04-SURF SW15-SB07-0520 SW15-SB07-2040 SW15-SB07-SURF SW15-SB09-0520 SW15-SB09-2040 SW15-SB09-SURF SW15-SB29-0520 SW15-SB29-SURF SW15-SB31-0520 SW15-SB31-SURF SW15-SLB04-0520 SW15-SLB04-SURF	detected in one of the MB which affects only one batch. The "U1" qualifiers were removed from samples in the batch with a compliant blank and from samples in the affected batch because the Na level detected in the samples were all > 5x the level detected in the blank and in most cases was much greater than 10x that level.
J28849 METALS	Thallium	UJ	U	SW15-SB29-0520 SW15-SB29-SURF SW15-SB31-0520 SW15-SB31-SURF SW15-SLB04-0520 SW15-SLB04-SURF	The initial validators qualified all thallium results for matrix spike recovery. The thallium %R recovered low for one batch and recovered within the limits in the second batch. The "UJ" qualifier was removed from the thallium results associated with the compliant matrix spike recovery.
J28849 METALS	Chromium Iron Vanadium	J	None	SW15-SB28-0520 SW15-SB28-2040 SW15-SB28-4060 SW15-SB28-SURF SW15-SB04-0520 SW15-SB04-2040 SW15-SB04-SURF SW15-SB07-0520 SW15-SB07-2040 SW15-SB07-SURF SW15-SB09-0520 SW15-SB09-2040 SW15-SB09-SURF	The "J" qualifier was removed from the samples associated with a compliant laboratory duplicate. Only samples in the second batch are associated with the non-compliant RPD between original sample and laboratory duplicate.
J28849 METALS	Mercury	J+	None	SW15-SB29-0520 SW15-SB29-SURF	The "J+" qualifier was removed from the samples associated with a compliant matrix spike recovery. Only samples in the first batch are associated with the non-compliant %R.
J28849 METALS	Sodium	U1	J	SW15-SB02-6080 SW15-SB02-8010 SW15-SB28-6080 SW15-SB28-8010	The initial validators qualified all sodium results (between MDL and CRQL) with a "U1" because of blank contamination. The "U1" qualifiers were removed from samples because the Na level detected in the samples were all > 100x the level detected in the blank.
J28849 PAH SIM	Benzo(a)anthracene Benzo(a)pyrene	None	J	SW15-SB31-SURF	In accordance with the Organic NFG, sample results are qualified "J" or "UJ" when the percent moisture is ≥ 70% and < 90%. Either a

DATA QUALIFICATION DIFFERENCES SUMMARY TABLE

SDG/Fraction	Analyte/ Compound	MCGI Qualifier	QATS Qualifier	EPA Sample ID	QATS Justification for EDD Revision
	Benzo(b)fluoranthene Benzo(g,h,i)perylene Benzo(k)fluoranthene Chrysene, Fluoranthene Indeno(1,2,3-cd)pyrene Phenanthrene, Pyrene				"J" qualifier was added to the "U", or a "J" qualifier was assigned.
J28849 PAH SIM	Acenaphthene Acenaphthylene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(g,h,i)perylene Benzo(k)fluoranthene Chrysene, Fluoranthene Indeno(1,2,3-cd)pyrene Phenanthrene, Pyrene	U None	UJ J	SW15-SB29-SURF	In accordance with the Organic NFG, sample results are qualified "J" or "UJ" when the percent moisture is ≥ 70% and < 90%. Either a "J" qualifier was added to the "U", or a "J" qualifier was assigned.
J28849 SEM METALS	Mercury SEM	J	U	SW15-SB07-SURF	Trace level of mercury SEM between the MDL and CRQL was detected in one CCB. The original validation did not report or qualify for the continuing calibration blank contamination. The mercury SEM result for one sample has been qualified "U" and the CRQL entered into the DVR column of the EDD.
J28895 ORGANOTINS	Monobutyltin	UJ	U	SW15-SB33-05203 SW15-SB33-SURF	The LCS is flagged as being out of criteria; however, the recovery is 24% which is within the 10-48% criteria. The "UJ" was removed and replaced by the original "U" qualifier.
J28895 METALS	Selenium	UJ	U	SW15-SB33-0520 SW15-SB41-0520 SW15-SB37-SURF	The initial validators qualified all selenium results "J" and "UJ" due to one field duplicate comparison. One result is a "J" value (between the MDL and CRQL), and the other result is ND. The "UJ" qualifiers were removed and replaced with a "U".
J28895 METALS	Sodium	U1	J	SW15-SB33-0520 SW15-SB33-SURF SW15-SB38-0520 SW15-SB38-0520-FD SW15-SB38-SURF SW15-SB41-0520 SW15-SB41-2040 SW15-SB41-SURF SW15-SB34-0520 SW15-SB34-SURF SW15-SB37-0520 SW15-SB37-SURF SW15-SB37-SURF-FD SW15-SB39-0520 SW15-SB39-2040 SW15-SB39-SURF SW15-SB40-0520	The initial validators qualified all sodium results (between MDL and CRQL) with a "U1" because of blank contamination. The "U1" qualifiers were removed from samples because the Na level detected in the samples were all > 5x the level detected in the blank.

DATA QUALIFICATION DIFFERENCES SUMMARY TABLE

SDG/Fraction	Analyte/ Compound	MCGI Qualifier	QATS Qualifier	EPA Sample ID	QATS Justification for EDD Revision
				SW15-SB40-SURF	
J28895 SVOC	4-Chloroaniline 3,3'-Dichlorobenzidine Hexachlorocyclopentadiene	R	UJ	SW15-SB33-SURF SW15-SB41-0520 SW15-SB41-2040	The initial validators qualified results "R" due to 0% recoveries for DMC6 (4-Chloroaniline-d4). The advisory limits for this DMC are 1-145%. The results should not be rejected based on the 0% R when the low limit is 1%. The QATS validators removed the "R" qualifier and replaced it with a "UJ".
J28895 SVOC	4-Chloro-3-methylphenol 2-Nitroaniline, 4-Nitrophenol Butylbenzylphthalate Di-n-octylphthalate	U	UJ	SW15-SB33-SURF SW15-SB41-0520	The %D for the CCV exceeded criteria.
J28895 SVOC	Pyrene	None	J	SW15-SB41-0520	The %D for the CCV exceeded criteria.
J28895 SVOC	1,4-Dioxane	U	UJ	SW15-SB41-0520	The Data Validation Report stated that 1.4-Doxane was qualified "UJ" due to DMC1 exceeding criteria; however, it was not qualified in the EDD file.
J28895 SVOC	1,4-Dioxane	UJ	U	SW15-SB34-0520	The DMC1 was within criteria for this sample, the "UJ" was changed back to the original "U" qualifier.
J28895 SVOC	Benzo(a)anthracene Benzo(a)pyrene Benzo(g,h,i)perylene Fluoranthene Indeno(1,2,3-cd)pyrene Phenanthrene, Pyrene	J	None	SW15-SB37-SURF	The initial validators qualified all results "J" due to the field duplicate comparison. QATS removed the "J" qualifiers from the compounds where the RPD was < 100%.
J28895 SVOC	Acenaphthene Acenaphthylene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(g,h,i)perylene Benzo(k)fluoranthene Chrysene Dibenzo(a,h)anthracene Fluoranthene Indeno(1,2,3-cd)pyrene Phenanthrene, Pyrene	UJ or J	U or None	SW15-SB37-SURF-FD	The initial validators qualified all results "J" and "UJ" due to the field duplicate comparison. QATS removed the "J" qualifiers from the compounds where the RPD was < 100%.
J28895 TOC	Total Organic Carbon	J	U	SW15-SB34-SURF SW15-SB37-SURF-FD	The sample results are < 5x the level detected in the associated method blanks; therefore, the results are reported as "U" and the CRQL entered into the DVR column of the EDD.
J28916 METALS	Cadmium	U1	J	SW15-SB13-0520 SW15-SB13-0520-FD SW15-SB13-2040 SW15-SB18-SURF SW15-SB25-SURF SW15-SB25-SURF-FD	The initial validators qualified all cadmium results (between MDL and CRQL) with a "U1" because of blank contamination. The "U1" qualifiers were removed from samples where the Cd level detected in the samples was > 5x the level detected in the blank.

DATA QUALIFICATION DIFFERENCES SUMMARY TABLE

SDG/Fraction	Analyte/ Compound	MCGI Qualifier	QATS Qualifier	EPA Sample ID	QATS Justification for EDD Revision
J28916 METALS	Cadmium	J+	None	SW15-SB13-4060 SW15-SB18-0520 SW15-SB18-2040 SW15-SB15-0520	The initial validators qualified all detected cadmium results with a "J+" because of blank contamination. The "J+" qualifiers were removed from samples where the Cd level detected in the samples was > 10x the level detected in the blank.
J28916 METALS	Selenium	UJ	U	SW15-SB12-0520 SW15-SB19-2040 SW15-SB13-0520-FD	The initial validators qualified all selenium results "J" and "UJ" due to one field duplicate comparison. One result is a "J" value (between the MDL and CRQL), and the other result is ND. The "UJ" qualifiers were removed and replaced with a "U".
J28916 METALS	Mercury	J	None	SW15-SB13-2040 SW15-SB13-4060 SW15-SB18-0520 SW15-SB18-2040 SW15-SB15-0520	The initial validators qualified all detected mercury results "J" due to one field duplicate comparison. The RPD is < 50%; therefore, the "J" qualifiers were removed.
J28916 TOC	Total Organic Carbon	J	U	SW15-SB12-0520	The sample result is < 5x the level detected in the associated method blanks; therefore, the result is reported as "U" and the CRQL entered into the DVR column of the EDD.
J28916 TOC	Total Organic Carbon	J	None	SW15-SB19-0520 SW15-SB19-2040 SW15-SB19-2040-FD SW15-SB19-SURF SW15-SB13-0520 SW15-SB13-0520-FD SW15-SB13-2040 SW15-SB13-4060 SW15-SB13-SURF SW15-SB18-0520 SW15-SB18-2040 SW15-SB18-SURF SW15-SB25-0520 SW15-SB25-2040 SW15-SB25-SURF SW15-SB25-SURF-FD SW15-SB15-0520 SW15-SB15-2040	The initial validators qualified all TOC results "J" due to two field duplicate comparisons. One TOC RPD is < 50%; the other is 58%; however, no qualification is necessary unless the RPD is > 100%; therefore, the "J" qualifiers were removed.
J28916 AMMONIA	Ammonia, distilled	J	None	SW15-SB12-0520 SW15-SB19-0520 SW15-SB19-2040-FD SW15-SB19-SURF SW15-SB13-0520 SW15-SB13-0520-FD SW15-SB13-2040 SW15-SB13-SURF SW15-SB18-0520 SW15-SB18-2040 SW15-SB18-SURF	The initial validators qualified all detected ammonia results "J" due to one field duplicate comparison. One ammonia RPD is 51%. However, no qualification is necessary unless the RPD is > 100%; therefore, the "J" qualifiers were removed.

DATA QUALIFICATION DIFFERENCES SUMMARY TABLE

SDG/Fraction	Analyte/ Compound	MCGI Qualifier	QATS Qualifier	EPA Sample ID	QATS Justification for EDD Revision
				SW15-SB15-0520 SW15-SB15-2040	
J28916 SEM METALS	Cadmium SEM	UJ	U	SW15-SB12-SURF SW15-SB19-0520 SW15-SB19-SURF SW15-SB13-0520 SW15-SB13-SURF SW15-SB18-SURF SW15-SB25-0520	The initial validators qualified cadmium SEM "UJ" due to field duplicate comparison. One result is a "J" value (between the MDL and CRQL), and the other result is ND. The "UJ" qualifier was removed and replaced with a "U" for all samples except SW15-SB25-SURF and SW15-SB25-SURF-FD because of a holding time exceedance.
J28916 SEM METALS	Lead SEM	J	None	SW15-SB19-0520 SW15-SB13-0520 SW15-SB13-0520-FD SW15-SB18-SURF SW15-SB15-0520	The initial validators qualified all lead SEM results "J" due to one of the two field duplicate comparisons. One lead RPD is 79%. However, no qualification is necessary unless the RPD is > 100%; therefore, the "J" qualifiers were removed for all results above the CRQL except SW15-SB25-SURF and SW15-SB25-SURF-FD because of holding time exceedance.
J28916 SEM METALS	Zinc SEM	J	None	SW15-SB12-SURF SW15-SB19-0520 SW15-SB19-SURF SW15-SB13-0520 SW15-SB13-0520-FD SW15-SB13-SURF SW15-SB18-SURF SW15-SB25-0520 SW15-SB15-0520	The initial validators qualified all zinc SEM results "J" due to one of the two field duplicate comparisons. One zinc SEM RPD is 45%. However, no qualification is necessary unless the RPD is > 100%; therefore, the "J" qualifiers were removed for all results above the CRQL except SW15-SB25-SURF and SW15-SB25-SURF-FD because of holding time exceedance.
J28916 PAH SIM	Phenanthrene	UJ	U	SW15-SB19-2040	The initial validators qualified the phenanthrene result "UJ" due to one field duplicate comparison. One result is a "J" value (between the MDL and CRQL), and the other result is ND. The "UJ" qualifier was removed and replaced with a "U".
J28916 PAH SIM	Acenaphthylene	UJ	U	SW15-SB13-0520	The initial validators qualified the acenaphthylene result "UJ" due to one field duplicate comparison. One result is a "J" value (between the MDL and CRQL), and the other result is ND. The "UJ" qualifier was removed and replaced with a "U".
J28916 PAH SIM	1-Methylnaphthalene 2-Methylnaphthalene Naphthalene	J	None	SW15-SB13-0520 SW15-SB13-0520-FD	The initial validators qualified the results "J" due to a field duplicate comparison. The RPDs are < 50%; therefore, the "J" qualifiers were removed unless the results are between the MDL and CRQL.
J28916 PAH SIM	Acenaphthene	UJ	U	SW15-SB25-SURF-FD	The initial validators qualified the acenaphthene result "UJ" due to one field duplicate comparison. One result is a "J" value (between the MDL and CRQL), and the other result is ND. The "UJ" qualifier was removed and replaced with a "U".
J28916 PAH SIM	Benzo(g,h,i)perylene Benzo(k)fluoranthene Indeno(1,2,3-cd)pyrene Pyrene	J	None	SW15-SB25-SURF SW15-SB25-SURF-FD	The initial validators qualified the results "J" due to a field duplicate comparison. The RPDs are < 50%; therefore, the "J" qualifiers were removed unless the results are between the MDL and CRQL.

DATA QUALIFICATION DIFFERENCES SUMMARY TABLE

SDG/Fraction	Analyte/ Compound	MCGI Qualifier	QATS Qualifier	EPA Sample ID	QATS Justification for EDD Revision
J28916 SVOC	Bis(2-ethylhexyl)phthalate Butylbenzylphthalate	U1	UJ	SW15-SB12-0520 SW15-SB12-SURF SW15-SB19-2040 SW15-SB19-2040-FD SW15-SB13-0520 SW15-SB13-0520-FD SW15-SB13-2040 SW15-SB13-SURF SW15-SB25-2040	The initial validators changed the "J" qualifier to "U1" due to blank contamination; however, the CCV was also out of criteria; therefore, the "U1" qualifier was changed to "UJ".
J28916 SVOC	Bis(2-ethylhexyl)phthalate	U1	UJ	SW15-SB19-0520 SW15-SB19-SURF	The initial validators changed the "J" qualifier to "U1" due to blank contamination; however, the CCV was also out of criteria; therefore, the "U1" qualifier was changed to "UJ".
J28916 SVOC	Butylbenzylphthalate	U1	J	SW15-SB19-0520 SW15-SB19-SURF	The initial validators qualified "U1" due to blank contamination; however, the sample result has a concentration >10x the level detected in the blank and therefore, should not be qualified "U1". The original "J" qualifier was restored.
J28916 SVOC	4-Chloro-3-methylphenol Phenol	UJ	U	SW15-SB12-0520 SW15-SB12-SURF SW15-SB19-0520 SW15-SB19-2040 SW15-SB19-2040-FD SW15-SB19-SURF SW15-SB13-0520 SW15-SB13-0520-FD SW15-SB13-2040 SW15-SB25-2040	The initial validators applied an incorrect closing CCV to the samples in this SDG. The initial validators used a CCV from 8/22/15 when the closing CCV from 8/23/15 should have been applied. These qualifiers were removed from the affected compounds.
J28916 SVOC	4-Nitroaniline	UJ	U	SW15-SB12-0520 SW15-SB12-SURF SW15-SB19-0520 SW15-SB19-2040 SW15-SB19-2040-FD SW15-SB19-SURF SW15-SB13-0520 SW15-SB13-0520-FD SW15-SB13-2040 SW15-SB13-SURF SW15-SB25-2040	The initial validators qualified "UJ", however, it is not clear why it was qualified. QATS restored the qualifier for this compound to the original "U".
J28916 SVOC	Pyrene	U	UJ	SW15-SB12-SURF SW15-SB19-2040 SW15-SB19-2040-FD	The %D for the CCV exceeded criteria.
J28916 SVOC	4-Chloroaniline 3,3'-Dichlorobenzidine Hexachlorocyclopentadiene	R	UJ	SW15-SB13-0520 SW15-SB13-0520-FD SW15-SB25-0520 SW15-SB25-SURF	The initial validators qualified results "R" due to 0% recoveries for DMC6 (4-Chloroaniline-d4). The advisory limits for this DMC are 1-145%. The results should not be rejected based on the 0% R when the low limit is 1%. The QATS validators removed the "R" qualifier

DATA QUALIFICATION DIFFERENCES SUMMARY TABLE

SDG/Fraction	Analyte/ Compound	MCGI Qualifier	QATS Qualifier	EPA Sample ID	QATS Justification for EDD Revision
				SW15-SB25-SURF-FD	and replaced it with a "UJ".
J28916 SVOC	Acenaphthene Dibenzofuran	UJ	U	SW15-SB13-0520	The initial validators qualified "J" and "UJ" due to field duplicate comparison. One result is a "J" value (between the MDL and CRQL), and the other result is ND. The "UJ" qualifier was removed and replaced with a "U".
J28916 SVOC	2,2'-Oxybis(1-chloropropane)	U	UJ	SW15-SB25-0520 SW15-SB25-SURF SW15-SB25-SURF-FD	Initial calibration %RSD exceeded criteria.
J28916 SVOC	Di-n-octylphthalate	U	UJ	SW15-SB25-0520 SW15-SB25-SURF	The %D for the CCV exceeded criteria.
J28916 VOA	Bromomethane	UJ	U	SW15-SB13-0520	The initial validators qualified "J" and "UJ" due to field duplicate comparison. One result is a "J". The "UJ" qualifier was removed and replaced with a "U".
J28921 AROCLOR	Aroclor-1254, Aroclor-1260	UJ	U	SW15-SB32-0520	The initial validators qualified "J" and "UJ" due to field duplicate comparison. One result is a "J" value (between the MDL and CRQL), and the other result is ND. The "UJ" qualifier was removed and replaced with a "U". The field duplicate sample results are still a "J" value; therefore, the "J" qualifier remains.
J28921 AROCLOR	Aroclor-1260	UJ	U	SW15-SB24-0520-FD	The initial validators qualified "J" and "UJ" due to field duplicate comparison. One result is a "J" value (between the MDL and CRQL), and the other result is ND. The "UJ" qualifier was removed and replaced with a "U". The original sample results are still a "J" value; therefore, the "J" qualifier remains.
J28921 AROCLOR	Aroclor-1254	UJ	None	SW15-SB24-0520	The initial validators qualified Aroclor-1254 results "J" due to one of the two field duplicate comparisons. One Aroclor-1254 RPD is 43%. However, no qualification is necessary unless the RPD is > 100%; therefore, the "J" qualifier was removed for the result above the CRQL.
J28921 PEST	4,4'-DDT	U	UJ	SW15-SB24-0520 SW15-SB24-0520-FD SW15-SB24-SURF	The initial validators did not qualify for the CCV %D exceeding criteria. A "J" qualifier was added to the samples associated with CCV low %D failures.
J28921 PEST	Endrin Aldehyde	UJ	U	SW15-SB24-0520-FD	The initial validators qualified "J" and "UJ" due to field duplicate comparison. One result is a "J" value (between the MDL and CRQL), and the other result is ND. The "UJ" qualifier was removed and replaced with a "U".
J28921 TOC	Total Organic Carbon	J	U	SW15-SB24-4060 SW15-SB30-0520 SW15-SB30-2040 SW15-SB30-SURF	The sample results are < 5x the level detected in the associated method blanks; therefore, the results are reported as "U" and the CRQL entered into the DVR column of the EDD.
J28921 TOC	Total Organic Carbon	J	J+	SW15-SB15-SURF SW15-SB32-4060 SW15-SB32-6080 SW15-SB32-8010	The initial validators superseded the "J+" qualifier for a high matrix spike recovery with a "J" because one FD RPD was > 100%. Only the original sample and field duplicate sample should be qualified for FD RPD; therefore, the "J" qualifiers for the other sample results

DATA QUALIFICATION DIFFERENCES SUMMARY TABLE

SDG/Fraction	Analyte/ Compound	MCGI Qualifier	QATS Qualifier	EPA Sample ID	QATS Justification for EDD Revision
				SW15-SB32-2040 SW15-SB32-SURF SW15-SB24-0520 SW15-SB24-0520-FD SW15-SB24-2040 SW15-SB24-SURF SW15-SB30-4060 SW15-SB20-2040 SW15-SB20-4060	were changed to "J+".
J28921 SEM METALS	Cadmium SEM	U	UJ	SW15-SB15-SURF SW15-SB32-SURF SW15-SB30-SURF	The SEM analysis was performed more than 14-days after extraction, which exceeds the holding time requirements listed in the QAPP, laboratory SOP, and analytical method.
J28921 SEM METALS	Nickel SEM	U	UJ	SW15-SB32-SURF SW15-SB30-SURF	The SEM analysis was performed more than 14-days after extraction, which exceeds the holding time requirements listed in the QAPP, laboratory SOP, and analytical method.
J28921 SEM METALS	Copper SEM Lead SEM	U	UJ	SW15-SB30-SURF	The SEM analysis was performed more than 14-days after extraction, which exceeds the holding time requirements listed in the QAPP, laboratory SOP, and analytical method.
J28921 SEM METALS	Zinc SEM	None	J	SW15-SB15-SURF SW15-SB32-SURF	The SEM analysis was performed more than 14-days after extraction, which exceeds the holding time requirements listed in the QAPP, laboratory SOP, and analytical method.
J28921 PAH SIM	Acenaphthene	UJ	U	SW15-SB32-0520-FD	The initial validators qualified "J" and "UJ" due to field duplicate comparison. One result is a "J" value (between the MDL and CRQL), and the other result is ND. The "UJ" qualifier was removed and replaced with a "U".
J28921 PAH SIM	Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene, Fluoranthene Indeno(1,2,3-cd)pyrene Phenanthrene, Pyrene	J	None	SW15-SB32-0520-FD	The initial validators qualified the results "J" due to a field duplicate comparison. The RPDs are < 50%; therefore, the "J" qualifiers were removed unless the results are between the MDL and CRQL.
J28921 PAH SIM	2-Methylnaphthalene Anthracene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(g,h,i)perylene Benzo(k)fluoranthene Chrysene Dibenzo(a,h)anthracene Fluorene Indeno(1,2,3-cd)pyrene Naphthalene, Phenanthrene	None	J	SW15-SB32-2040	Two DMCs were used for each sample. The recoveries exceeded criteria for both of the DMCs. All results qualified "J" due to DMC failure.

DATA QUALIFICATION DIFFERENCES SUMMARY TABLE

SDG/Fraction	Analyte/ Compound	MCGI Qualifier	QATS Qualifier	EPA Sample ID	QATS Justification for EDD Revision
	Pyrene				
J28921 PAH SIM	Naphthalene Phenanthrene	J	None	SW15-SB32-0520	The initial validators qualified the results "J" due to a field duplicate comparison. The RPDs are < 50%; therefore, the "J" qualifiers were removed.
J28921 PAH SIM	Anthracene Benzo(a)anthracene Benzo(b)fluoranthene Benzo(g,h,i)perylene Indeno(1,2,3-cd)pyrene Phenanthrene	J	None	SW15-SB24-0520	The initial validators qualified the results "J" due to a field duplicate comparison. The RPDs are < 50%; therefore, the "J" qualifiers were removed.
J28921 PAH SIM	Benzo(a)anthracene Benzo(a)pyrene, Pyrene, Benzo(b)fluoranthene Benzo(g,h,i)perylene Indeno(1,2,3-cd)pyrene Naphthalene, Phenanthrene	J	None	SW15-SB24-0520-FD	The initial validators qualified the results "J" due to a field duplicate comparison. The RPDs are < 50%; therefore, the "J" qualifiers were removed.
J28921 SVOC	2,2'-Oxybis(1-chloropropane)	U	UJ	SW15-SB30-0520 SW15-SB30-2040 SW15-SB30-4060 SW15-SB30-SURF	Initial calibration %RSD exceeded criteria.
J28921 SVOC	Benzo(g,h,i)perylene Dibenzo(a,h)anthracene Di-n-octylphthalate Hexachlorocyclopentadiene Indeno(1,2,3-cd)pyrene	UJ	U	SW15-SB30-0520 SW15-SB30-2040 SW15-SB30-SURF	The initial validators qualified these compounds for exceeding the CCV %D criteria. According to the FORM 7A for the opening and closing CCVs – all criteria were met. The "UJ" qualifiers were changed back to the original "U".
J28921 SVOC	Di-n-octylphthalate	UJ	U	SW15-SB30-4060	The initial validators qualified this compound for exceeding the CCV %D criteria. According to the FORM 7A for the opening and closing CCVs – all criteria were met. The "UJ" qualifier was changed back to the original "U".
J28921 SVOC	3,3'-Dichlorobenzidine	R	U	SW15-SB30-2040	The initial validators qualified result "R". It is not clear from the Data Validation Report as to why the qualifier was assigned. It was possibly qualified "R" for the DMC6 recovery for sample SW15-SB30-4060. The QATS validators removed the "R" qualifier and replaced it with the original "U".
J28921 SVOC	4-Chloroaniline Hexachlorocyclopentadiene	R	UJ	SW15-SB30-4060	The initial validators qualified results "R" due to 0% recoveries for DMC6 (4-Chloroaniline-d4). The advisory limits for this DMC are 1-145%. The results should not be rejected based on the 0% R when the low limit is 1%. The QATS validators removed the "R" qualifier and replaced it with a "UJ".
J28921 SVOC	3,3'-Dichlorobenzidine	U	UJ	SW15-SB30-4060	DMC6 recovery exceeded criteria, 3,3'-Dichlorobenzidine should have been qualified but wasn't (possibly sample SW15-SB30-2040 was qualified instead). A "UJ" qualifier was assigned.
J28921 SVOC	Di-n-butylphthalate	J+		SW15-SB30-4060	The initial validators qualified the compound result "J+". It is not

DATA QUALIFICATION DIFFERENCES SUMMARY TABLE

SDG/Fraction	Analyte/ Compound	MCGI Qualifier	QATS Qualifier	EPA Sample ID	QATS Justification for EDD Revision
					clear from the Data Validation Report as to why the qualifier was assigned. It was possibly assigned for blank contamination; however, the level detected in the blank (9.2 ug/kg) is very small compared to the sample result (400 ug/kg). As a result, it doesn't warrant a qualifier.
J28921 METALS	Aluminum Copper Magnesium Nickel Potassium Vanadium Zinc	J	None	SW15-SB15-SURF SW15-SB32-0520-FD SW15-SB32-4060 SW15-SB32-6080 SW15-SB32-8010 SW15-SB32-2040 SW15-SB32-0520 SW15-SB32-SURF SW15-SB24-0520 SW15-SB24-0520-FD SW15-SB24-2040 SW15-SB24-4060 SW15-SB24-SURF SW15-SB30-0520 SW15-SB30-2040 SW15-SB30-4060 SW15-SB30-SURF SW15-SB20-0520 SW15-SB20-2040 SW15-SB20-4060	The initial validators qualified the results "J" due to a field duplicate comparison. Most RPDs are < 50%, some < 100%; therefore, the "J" qualifiers were removed unless the results are between the MDL and CRQL.
J28921 METALS	Cadmium	J	None	SW15-SB32-0520-FD SW15-SB32-2040 SW15-SB20-2040	The initial validators qualified the cadmium results "J" due to a field duplicate comparison. The RPDs are < 50%; therefore, the "J" qualifiers were removed.
J28921 METALS	Mercury	J	None	SW15-SB32-2040 SW15-SB24-0520 SW15-SB24-0520-FD SW15-SB30-4060 SW15-SB20-0520 SW15-SB20-2040 SW15-SB20-4060	The initial validators qualified all detected mercury results "J" due to a field duplicate comparison. The "J" qualifiers were removed from all samples except the original and field duplicate that exceeded the RPD criteria.
J28921 METALS	Selenium	UJ	U	SW15-SB32-0520 SW15-SB32-SURF SW15-SB24-SURF SW15-SB30-0520 SW15-SB30-2040 SW15-SB30-4060	The initial validators qualified "J" and "UJ" due to field duplicate comparison. One result is a "J" value (between the MDL and CRQL), and the other result is ND. The "UJ" qualifier was removed and replaced with a "U".
J28921 METALS	Silver	UJ	U	SW15-SB15-SURF SW15-SB32-4060 SW15-SB32-6080 SW15-SB32-8010	The initial validators qualified silver "J" and "UJ" due to field duplicate comparison. One result is a "J" value (between the MDL and CRQL), and the other result is ND. The "UJ" qualifier was removed and replaced with a "U".

DATA QUALIFICATION DIFFERENCES SUMMARY TABLE

SDG/Fraction	Analyte/ Compound	MCGI Qualifier	QATS Qualifier	EPA Sample ID	QATS Justification for EDD Revision
				SW15-SB32-0520 SW15-SB32-SURF SW15-SB24-2040 SW15-SB24-4060 SW15-SB30-0520 SW15-SB30-2040 SW15-SB30-SURF	
J28921 METALS	Sodium	U1	J	SW15-SB33-0520 SW15-SB33-SURF SW15-SB38-0520 SW15-SB38-0520-FD SW15-SB38-SURF SW15-SB41-0520 SW15-SB41-2040 SW15-SB41-SURF SW15-SB34-0520 SW15-SB34-SURF SW15-SB37-0520 SW15-SB37-SURF SW15-SB37-SURF-FD SW15-SB39-0520 SW15-SB39-2040 SW15-SB39-SURF SW15-SB40-0520 SW15-SB40-SURF	The initial validators qualified all sodium results (between MDL and CRQL) with a "U1" because of blank contamination. The "U1" qualifiers were removed from samples because the Na level detected in the samples were all > 10x the levels detected in the blanks.
J28934 AROCLOR	Aroclor-1254	None	J	SW15-SB16-2040	The initial validators did not qualify for the CCV %D exceeding criteria. A "J" qualifier was added to the sample associated with CCV %D failures.
J28934 AROCLOR	Aroclor-1254, Aroclor-1260	UJ	U	SW15-SB17-0520-FD	The initial validators qualified "J" and "UJ" due to field duplicate comparison. One result is a "J" value (between the MDL and CRQL), and the other result is ND. The "UJ" qualifier was removed and replaced with a "U". The original sample results are still a "J" value; therefore, the "J" qualifier remains.
J28934 TOC	Total Organic Carbon	J	None	SW15-SB20-SURF SW15-SB17-0520 SW15-SB17-0520-FD SW15-SB17-2040 SW15-SB17-SURF SW15-SB14-0520 SW15-SB14-2040 SW15-SB14-4060 SW15-SB14-SURF SW15-SB23-0520 SW15-SB23-2040 SW15-SB23-4060	The initial validators qualified all detected TOC results "J" due to one field duplicate comparison with an RPD > 50% but < 100%. No qualification is necessary unless the RPD is > 100%; therefore, the "J" qualifiers were removed.

DATA QUALIFICATION DIFFERENCES SUMMARY TABLE

SDG/Fraction	Analyte/ Compound	MCGI Qualifier	QATS Qualifier	EPA Sample ID	QATS Justification for EDD Revision
				SW15-SB23-SURF SW15-SB16-0520 SW15-SB16-2040 SW15-SB16-SURF SW15-SB21-0520 SW15-SB21-2040 SW15-SB20-6080 SW15-SB14-6080 SW15-SB23-6080 SW15-SB16-6080	
J28934 SEM METALS	Cadmium SEM Nickel SEM	U	UJ	SW15-SB01-0520 SW15-SB01-SURF	The SEM analysis was performed more than 14-days after extraction, which exceeds the holding time requirements listed in the QAPP, laboratory SOP, and analytical method.
J28934 SEM METALS	Cadmium SEM	U	UJ	SW15-SB17-0520	The SEM analysis was performed more than 14-days after extraction, which exceeds the holding time requirements listed in the QAPP, laboratory SOP, and analytical method.
J28934 VOA	Methyl acetate	UJ	U	SW15-SB17-0520	The initial validators qualified "J" and "UJ" due to field duplicate comparison. One result is a "J" value (between the MDL and CRQL), and the other result is ND. The "UJ" qualifier was removed and replaced with a "U".
J28934 VOA	Toluene	UJ	U	SW15-SB17-0520-FD	The initial validators qualified "J" and "UJ" due to field duplicate comparison. One result is a "J" value (between the MDL and CRQL), and the other result is ND. The "UJ" qualifier was removed and replaced with a "U".
J28921 PAH SIM	Fluoranthene	J	None	SW15-SB20-SURF	Fluoranthene exceeded %D criteria for one closing CCV; however, this sample was not associated with that CCV. The "J" qualifier was removed.
J28934 PAH SIM	2-Methylnaphthalene Acenaphthene C2-Naphthalenes C3 Fluorenes, C3-Naphthalenes	UJ	U	SW15-SB17-0520	The initial validators qualified "J" and "UJ" due to field duplicate comparison. One result is a "J" value (between the MDL and CRQL), and the other result is ND. The "UJ" qualifier was removed and replaced with a "U".
J28934 PAH SIM	Benzo(b)fluoranthene Dibenzo(a,h)anthracene Phenanthrene	J	None	SW15-SB17-0520 SW15-SB17-0520-FD	The initial validators qualified results "J" due to the field duplicate comparison. The RPDs were > 50% but < 100%. No qualification is necessary unless the RPD is > 100%; therefore, the "J" qualifiers were removed.
J28934 PAH SIM	Pyrene	None	J+	SW15-SB17-SURF	The MS %R and RPD both exceeded criteria for the QC performed on this sample.
J28934 PAH SIM	Phenanthrene	J+	None	SW15-SB17-SURF	It appears that the Phenanthrene was qualified "J+" instead of the Pyrene. The "J+" qualifier was removed.
J28934 SVOC	2,2'-Oxybis(1-chloropropane)	U	UJ	SW15-SB17-0520 SW15-SB17-0520-FD SW15-SB17-2040 SW15-SB17-SURF	Initial calibration %RSD exceeded criteria.

DATA QUALIFICATION DIFFERENCES SUMMARY TABLE

SDG/Fraction	Analyte/ Compound	MCGI Qualifier	QATS Qualifier	EPA Sample ID	QATS Justification for EDD Revision
J28934 SVOC	Di-n-octylphthalate Hexachlorocyclopentadiene	UJ	U	SW15-SB17-0520 SW15-SB17-0520-FD	The initial validators qualified these compounds for exceeding the CCV %D criteria. According to the FORM 7A for the opening and closing CCVs all criteria were met. The "UJ" qualifiers were changed back to the original "U".
J28934 SVOC	Benzo(g,h,i)perylene Dibenzo(a,h)anthracene Di-n-octylphthalate Hexachlorocyclopentadiene Indeno(1,2,3-cd)pyrene	UJ	U	SW15-SB17-SURF	The initial validators qualified these compounds for exceeding the CCV %D criteria. According to the FORM 7A for the opening and closing CCVs all criteria were met. The "UJ" qualifiers were changed back to the original "U".
J28934 SVOC	Benzo(b)fluoranthene	J	None	SW15-SB17-0520	The initial validators qualified result "J" due to the field duplicate comparison. The RPD was > 50% but < 100%. No qualification is necessary unless the RPD is > 100%; therefore, the "J" qualifier was removed.
J28934 SVOC	2-Methylnaphthalene Fluorene Naphthalene	UJ	U	SW15-SB17-0520	The initial validators qualified "J" and "UJ" due to field duplicate comparison. One result is a "J" value (between the MDL and CRQL), and the other result is ND. The "UJ" qualifier was removed and replaced with a "U".
J28934 SVOC	Acenaphthylene	UJ	U	SW15-SB17-0520-FD	The initial validators qualified "J" and "UJ" due to field duplicate comparison. One result is a "J" value (between the MDL and CRQL), and the other result is ND. The "UJ" qualifier was removed and replaced with a "U".
J28934 SVOC	4-Chloroaniline 3,3'-Dichlorobenzidine Hexachlorocyclopentadiene	R	UJ	SW15-SB17-2040	The initial validators qualified results "R" due to 0% recoveries for DMC6 (4-Chloroaniline-d4). The advisory limits for this DMC are 1-145%. The results should not be rejected based on the 0% R when the low limit is 1%. The QATS validators removed the "R" qualifier and replaced it with a "UJ".
J28934 SVOC	Dibenzo(a,h)anthracene Di-n-octylphthalate Hexachlorocyclopentadiene	UJ	U	SW15-SB17-0520 SW15-SB17-0520-FD	The initial validators qualified these compounds for exceeding the CCV %D criteria. According to the FORM 7A for the opening and closing CCVs all criteria were met. The "UJ" qualifiers were changed back to the original "U".
J28934 METALS	Sodium	U1	J	SW15-SB20-SURF SW15-SB01-0520 SW15-SB01-SURF SW15-SB17-0520 SW15-SB17-0520-FD SW15-SB17-2040 SW15-SB17-SURF SW15-SB14-0520 SW15-SB14-2040 SW15-SB14-4060 SW15-SB14-SURF SW15-SB23-0520 SW15-SB23-2040 SW15-SB23-4060	The initial validators qualified all sodium results (between MDL and CRQL) with a "U1" because of blank contamination. The "U1" qualifiers were removed from samples because the Na level detected in the samples were all > 10x the levels detected in the blanks.

DATA QUALIFICATION DIFFERENCES SUMMARY TABLE

SDG/Fraction	Analyte/ Compound	MCGI Qualifier	QATS Qualifier	EPA Sample ID	QATS Justification for EDD Revision
				SW15-SB23-SURF SW15-SB16-0520 SW15-SB16-2040 SW15-SB16-4060 SW15-SB16-SURF SW15-SB21-0520 SW15-SB21-2040	
J28934 METALS	Cadmium	U1	J	SW15-SB20-SURF SW15-SB01-0520 SW15-SB01-SURF SW15-SB17-0520 SW15-SB17-0520-FD SW15-SB17-2040 SW15-SB17-SURF SW15-SB14-0520 SW15-SB14-2040 SW15-SB14-4060 SW15-SB14-SURF SW15-SB23-0520 SW15-SB23-2040 SW15-SB23-4060 SW15-SB23-SURF SW15-SB16-4060 SW15-SB16-SURF SW15-SB20-6080 SW15-SB14-6080 SW15-SB23-6080 SW15-SB16-6080	The initial validators qualified all cadmium results (between MDL and CRQL) with a "U1" because of blank contamination. The "U1" qualifiers were removed from samples because the blank that contained the trace level of cadmium was only associated with one sample and the Cd level detected in that sample was a detected result much greater than 10x the level detected in the blank. The qualifiers were returned to the original "J" in all the other samples that were associated with a compliant blank.
J28934 METALS	Mercury	J	None	SW15-SB14-2040 SW15-SB14-4060 SW15-SB23-SURF SW15-SB16-0520 SW15-SB16-2040 SW15-SB21-0520 SW15-SB21-2040 SW15-SB20-6080 SW15-SB14-6080	The initial validators qualified all detected mercury results "J" due to one field duplicate comparison. The QATS validators left the "J" qualifier on the original and FD samples but removed the "J" from the other samples. Only the original and FD are qualified when the RPD exceeds criteria.
J28938 METALS	Mercury	J	None	SW15-SB26-0520 SW15-SB26-2040 SW15-SB22-0520 SW15-SB35-0520 SW15-SB35-2040 SW15-SB05-2040 SW15-SB11-0520 SW15-SB11-0520-FD	The initial validators qualified all detected mercury results "J" due to one field duplicate comparison. The RPD is > 50% but < 100%. The "J" qualifiers were removed.

DATA QUALIFICATION DIFFERENCES SUMMARY TABLE

SDG/Fraction	Analyte/ Compound	MCGI Qualifier	QATS Qualifier	EPA Sample ID	QATS Justification for EDD Revision
				SW15-SB11-SURF SW15-SB11-SURF-FD	
J28938 METALS	Sodium	U1	J	SW15-SB21-4060 SW15-SB21-SURF SW15-SB26-0520 SW15-SB26-2040 SW15-SB26-SURF SW15-SB22-0520 SW15-SB22-2040 SW15-SB22-2040-FD SW15-SB22-SURF SW15-SB35-0520 SW15-SB35-2040 SW15-SB35-SURF SW15-SB05-0520 SW15-SB05-2040 SW15-SB05-SURF SW15-SB11-0520 SW15-SB11-0520-FD SW15-SB11-SURF SW15-SB11-SURF-FD	The initial validators qualified all sodium results (between MDL and CRQL) with a "U1" because of blank contamination. The "U1" qualifiers were removed from samples because the Na level detected in the samples were all > 10x the levels detected in the blanks.
J28938 METALS	Potassium	U1	J	SW15-SB21-4060 SW15-SB35-2040 SW15-SB05-0520 SW15-SB05-2040 SW15-SB05-SURF	The initial validators qualified all potassium results (between MDL and CRQL) with a "U1" because of blank contamination. The "U1" qualifiers were removed from samples because the blank that contained the trace level of potassium was only associated with seven samples and the K levels detected in those samples were much greater than 10x the level detected in the blank. The qualifiers were returned to the original "J".
J28938 TOC	Total Organic Carbon	U1	J	SW15-SB21-4060	The initial validators qualified the sample result "U1" due to blank contamination; however, this sample was analyzed on 7/24/15. This analysis did not have contamination in the method blank or in the calibration blanks. The "U1" was replaced with the original "J" qualifier.
J28938 TOC	Total Organic Carbon	J	None	SW15-SB21-SURF SW15-SB26-0520 SW15-SB26-2040 SW15-SB26-SURF SW15-SB22-0520 SW15-SB22-2040 SW15-SB22-2040-FD SW15-SB22-SURF SW15-SB35-0520 SW15-SB35-2040 SW15-SB35-SURF SW15-SB05-0520	The initial validators qualified all TOC results "J" due to one field duplicate comparison. The TOC RPD is < 50%, and the criteria for FD in the associated QAPP is 50%. However, no qualification is necessary unless the RPD is > 100%; therefore, the "J" qualifiers were removed.

DATA QUALIFICATION DIFFERENCES SUMMARY TABLE

SDG/Fraction	Analyte/ Compound	MCGI Qualifier	QATS Qualifier	EPA Sample ID	QATS Justification for EDD Revision
				SW15-SB05-2040 SW15-SB05-SURF SW15-SB11-0520 SW15-SB11-0520-FD SW15-SB11-SURF SW15-SB11-SURF-FD	
J28938 AMMONIA	Ammonia, distilled	J	J-	SW15-SB05-0520 SW15-SB05-2040 SW15-SB05-SURF SW15-SB11-0520 SW15-SB11-0520-FD SW15-SB11-SURF	The initial validators superseded the "J-" qualifier for a low matrix spike duplicate recovery with a "J" because one FD RPD was > 35%. The QAPP criteria for field duplicate RPD is 50% with qualifying only when the RPD is > 100%. Therefore, the "J" qualifiers for the sample results were changed to "J-". (Note that the Data Validation Report stated that the percent recoveries for the ammonia MS sample SW15-SB11-0520 were high (> 110%) when in fact the MS recovery was within criteria (98%) and the MSD recovery was low (80%)).
J28938 AVS	Acid Volatile Sulfides	None	J	SW15-SB11-0520 SW15-SB11-0520-FD	The RPD between the field duplicate sample result and the original sample result is > 100%.
J28938 SEM METALS	Cadmium SEM	UJ	U	SW15-SB21-SURF SW15-SB26-SURF SW15-SB22-SURF SW15-SB35-0520 SW15-SB35-SURF SW15-SB11-0520-FD	The initial validators qualified cadmium SEM "UJ" due to field duplicate comparison. One result is a "J" value (between the MDL and CRQL), and the other result is ND. The "UJ" qualifier was removed and replaced with a "U" for all samples except SW15-SB05-SURF because of a holding time exceedance.
J28938 SEM METALS	Lead SEM Zinc SEM	J	None	SW15-SB21-SURF SW15-SB26-SURF SW15-SB22-SURF SW15-SB35-0520 SW15-SB35-SURF	The initial validators qualified lead SEM and zinc SEM in all samples "J" due to field duplicate comparison. Only the field duplicate sample and original sample should be qualified. The "J" qualifier was removed from all samples except the FD and original and SW15-SB05-SURF and SW15-SB11-SURF because of a holding time exceedance.
J28938 SVOC	2,2'-Oxybis(1-chloropropane)	U	UJ	SW15-SB11-0520 SW15-SB11-0520-FD SW15-SB11-SURF	Initial calibration %RSD exceeded criteria.
J28938 SVOC	1,4-Dioxane	U	UJ	SW15-SB11-0520 SW15-SB11-0520-FD SW15-SB11-SURF	Associated DMC exceeded criteria.
J28938 SVOC	Fluoranthene Dibenzofuran Carbazole Benzo(b)fluoranthene	J UJ	None U	SW15-SB11-0520	The initial validators qualified sample result "J" due to the field duplicate comparison. Either the RPDs were > 50% but < 100% or one result is a "J" value (between the MDL and CRQL), and the other result is ND. No qualification is necessary unless the RPD is > 100%; therefore, the "J" qualifiers were removed.
J28938 SVOC	Fluoranthene Anthracene Chrysene	J UJ	None U	SW15-SB11-0520-FD	The initial validators qualified result "J" due to the field duplicate comparison. Either the RPDs were > 50% but < 100% or one result is a "J" value (between the MDL and CRQL), and the other result is ND. No qualification is necessary unless the RPD is > 100%;

DATA QUALIFICATION DIFFERENCES SUMMARY TABLE

SDG/Fraction	Analyte/ Compound	MCGI Qualifier	QATS Qualifier	EPA Sample ID	QATS Justification for EDD Revision
					therefore, the "J" qualifiers were removed.
J28938 SVOC	Diethylphthalate	UJ	U	SW15-SB11-0520-FD	The initial validators qualified "UJ", however, it is not clear why it was qualified in the Data Validation Report. QATS has restored the qualifier for this compound with the original "U".
J28938 PAH SIM	2-Methylnaphthalene Anthracene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(g,h,i)perylene Chrysene Indeno(1,2,3-cd)pyrene Naphthalene, Pyrene	J	None	SW15-SB22-2040 SW15-SB22-2040-FD	The initial validators qualified result "J" due to the field duplicate comparison. The RPDs were > 50% but < 100%. No qualification is necessary unless the RPD is > 100%; therefore, the "J" qualifiers were removed.
J28938 PAH SIM	1-Methylnaphthalene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(e)pyrene Benzo(g,h,i)perylene Benzo(k)fluoranthene Chrysene, Fluoranthene Indeno(1,2,3-cd)pyrene Perylene, Pyrene	J UJ	None U	SW15-SB11-0520 SW15-SB11-0520-FD	The initial validators qualified result "J" due to the field duplicate comparison. Either the RPDs were > 50% but < 100% or one result is a "J" value (between the MDL and CRQL), and the other result is ND. No qualification is necessary unless the RPD is > 100%; therefore, the "J" qualifiers were removed.
J28938 PAH SIM	Acenaphthylene C1-Naphthalenes C4 Chrysenes	UJ	U	SW15-SB11-0520-FD	The initial validators qualified "J" and "UJ" due to field duplicate comparison. One result is a "J" value (between the MDL and CRQL), and the other result is ND. The "UJ" qualifier was removed and replaced with a "U".
J28965 AROCLOR	Aroclor-1016	UJ	U	SW15-SB06-0520-FD	The initial validators qualified "J" and "UJ" due to field duplicate comparison. One result is a "J" value (between the MDL and CRQL), and the other result is ND. The "UJ" qualifier was removed and replaced with a "U". The original sample results are still a "J" value; therefore, the "J" qualifier remains.
J28965 TOC	Total Organic Carbon	J	None	SW15-SB06-2040 SW15-SB06-SURF SW15-SB10-0520 SW15-SB10-2040 SW15-SB10-SURF SW15-SB27-0520 SW15-SB27-2040 SW15-SB27-SURF SW15-SB08-0520 SW15-SB08-SURF	The initial validators qualified all TOC results "J" due to one field duplicate comparison with an RPD of 93%. The QATS validators removed the "J" qualifier from all sample results except for the original sample (SW15-SB06-0520) and the field duplicate (SW15-SB06-0520-FD).
J28965 AMMONIA	Ammonia, distilled	J-	J-	SW15-SB06-0520 SW15-SB06-0520-FD	The ammonia results were qualified "J-" correctly in the EDD file due to low MSD percent recovery. However, the Data Validation

DATA QUALIFICATION DIFFERENCES SUMMARY TABLE

SDG/Fraction	Analyte/ Compound	MCGI Qualifier	QATS Qualifier	EPA Sample ID	QATS Justification for EDD Revision
				SW15-SB06-2040 SW15-SB06-SURF SW15-SB10-0520 SW15-SB10-2040 SW15-SB10-SURF SW15-SB08-0520 SW15-SB08-SURF	Report incorrectly states, "The MS of samples SW15-SB06-0520 displayed high recovery for Ammonia. Positive results in the associated samples were qualified "J+".
J28965 SEM METALS	Cadmium SEM	U	UJ	SW15-SB06-SURF	The SEM analysis was performed more than 14-days after extraction, which exceeds the holding time requirements listed in the QAPP, laboratory SOP, and analytical method.
J28965 SEM METALS	Lead SEM Zinc SEM	None	J	SW15-SB06-SURF	The SEM analysis was performed more than 14-days after extraction, which exceeds the holding time requirements listed in the QAPP, laboratory SOP, and analytical method.
J28965 METALS	Sodium	U1	J	SW15-SB06-0520 SW15-SB06-0520-FD SW15-SB06-2040 SW15-SB06-SURF SW15-SB10-0520 SW15-SB10-2040 SW15-SB10-SURF SW15-SB27-0520 SW15-SB27-2040 SW15-SB27-SURF SW15-SB08-0520 SW15-SB08-SURF	The initial validators qualified all sodium results (between MDL and CRQL) with a "U1" because of blank contamination. The "U1" qualifiers were removed from samples because the Na level detected in the samples were all greater than 10x the levels detected in the blanks.
J28965 ORGANOTINS	Monobutyltin	R	UJ	SW15-SB06-0520	The initial validators assigned an "R" qualifier because the MS/MSD %Rs were 0%. The NFG says to qualify "R" for %R's < 10% (excluding spiked analyte with %R lower limit of 10% or less). The MS/MSD limits for monobutyltin is 10-48% and therefore, would not be qualified "R".
J28965 PAH SIM	1-Methylnaphthalene Acenaphthene Benzo(e)pyrene C1 Chrysenes, C1 Fluorenes C1-Naphthalenes C3 Chrysenes, Perylene	UJ	U	SW15-SB06-0520	The initial validators qualified results "UJ" due to the field duplicate comparison. One result is a "J" value (between the MDL and CRQL) or detect, and the other result is ND. No qualification is necessary unless the RPD is > 100%; therefore, the "UJ" qualifiers were removed and replaced with the original "U" qualifier.
J28965 PAH SIM	1-Methylnaphthalene Perylene	J	None	SW15-SB06-0520-FD	The initial validators qualified results "UJ" due to the field duplicate comparison. One result is a detected value (between the MDL and CRQL), and the other result is ND. No qualification is necessary unless the RPD is > 100%; therefore, the "J" qualifiers were removed.